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08/581,050	12/27/1995	TAKAHISA UEDA		6204

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EXAMINER

DEPUMPO, DANIEL G

ART UNIT

PAPER NUMBER

3611

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 49

Application Number: 08/581,050

*MAILED*

Filing Date: December 27, 1995

*APR 23 2003*

Appellant(s): Ueda

*GROUP 3600*

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Felix J. D'Ambrosio

For Appellant

**EXAMINER'S ANSWER**

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This is in response to the appeal brief filed March 6, 2003.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claim 2.

Claims 1, 3-11, 13, 14 and 16-31 are withdrawn from consideration as not directed to the elected invention.

Claims 12 and 15 have been canceled.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

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**(6) Issues**

The appellant's statement of the issues in the brief is correct.

In view of appellant's remarks in the brief, the 35 U.S.C. 112, first and second paragraph rejections,

have been withdrawn. Consequently, issues 1 and 2 are now moot.

**(7) Grouping of Claims**

Claim 2 is the only claim on appeal.

**(8) ClaimsAppealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,134,030	Ueda	7/1992
4,455,334	Ogino	6/1984
4,559,862	Case	12/1985
4,190,257	Schnitzler	2/1980

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 2 stands finally rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda '030 in view of Ogino.

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Ueda discloses all features including the use of expanded graphite. In Ueda, it is noted that since the narrow fibers are laminated with the graphite, the graphite surrounds the fibers. Also, fig. 8 clearly shows that the graphite surrounds the fibers when the packing is complete. While Ueda does disclose that the graphite sheets and reinforcing fiber are "laminated" (which usually involves adhesive bonding), adhesives are not explicitly mentioned. However, Ogino teaches the use of longitudinally disposed fibers which are laminated with expanded graphite sheets by adhesives for the purpose of reinforcing the graphite sheets.

Therefore, it would have been obvious, in view of Ogino, to use adhesive to laminate the graphite sheets and fibers of Ueda together.

3. . . Claim 2 stands finally rejected under 35 U.S.C. 103(a) as being unpatentable over Case in view of Schnitzler.

Case discloses all claimed features except for the use of expanded graphite. Case discloses a packing made of braided yarns wherein the yarns are made up of twisted or braided fibers and graphite. Case also discloses the use of TFE binder which acts as an adhesive to bind the graphite to the fibers (also, see Ueda '030 col. 5, lines 19-20). Schnitzler teaches the well known use of expanded graphite which is preferred for use in packings due to its mechanical properties. Therefore, it would have been obvious, in view of Schnitzler, to utilize expanded graphite due to its preferred mechanical properties and commercial availability.

#### **(11) Response to Argument**

Initially, it is noted that this is the second appeal of claim 2. Minor amendments have been made to claim 2 since the previous appeal, however, the rejections have not changed. These rejections have been repeated since at least Paper No. 17 (mailed April 17, 1997), and were affirmed in the previous appeal. It addition, it is noted that most of appellant's arguments are identical to those presented in the previous appeal.

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As discussed in the "Issues" section above, the rejections under 35 U.S.C. 112 have been withdrawn.

At page 6, while discussing "Enclosure A", appellant urges that Ueda, Ogino and Schnitzler require that the expanded graphite particles be made into sheets, and that this is in contrast to the present invention. Then, in apparent contradiction, at page 7 (first paragraph), appellant urges that the "expanded graphite [of the present invention] may be a sheet of expanded graphite, but it does not have to be such". Nevertheless, it is noted that the claim is silent as to whether or not the expanded graphite is formed into a sheet. The claims do not recite any structure which defines over the applied references in this regard.

Regarding Ueda '030, appellant states that the fiber of Ueda is not the same as the claimed fiber (brief, page 7). Based on appellant's argument, it is unclear why appellant considers that these fibers are different. Possibly, appellant erroneously interprets Ueda to disclose a single reinforcing fiber, rather than the claimed plurality of reinforcing fibers. However, a careful reading of Ueda, at col. 4, <sup>lines</sup> ~~lines~~ 63-67 shows that Ueda in fact uses plural fibers. Ueda discloses that there are four layers of graphite and that a reinforcing fiber is laminated between the top two layers and between the bottom two layers. It is noted that only one fiber 2 is depicted in figure 7, however, this appears to depict a fiber which extends beyond the graphite. The other fiber appears to be shown as a dotted line.

Appellant's arguments regarding Ogino are not understood. This reference has merely been applied for a teaching of bonding.

In the paragraph spanning pages 8 and 9, appellant urges that the graphite of Ueda does not surround the fiber yarns. The examiner does not agree for the following reasons. Upon viewing appellant's "Enclosure D", it is clear that the graphite sheets of Ueda will "surround" the fiber when the sheets are "deflected into engagement" (depicted in Enclosure D) during lamination. The claim does not require the

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graphite to "engage" the fibers around the entire surface of the fibers, as argued by appellant. Instead, the claims merely require the graphite to "surround" the fibers. Moreover, it is noted that in fig. 8 Ueda clearly shows that the graphite surrounds the fibers when the packing is complete.

At the top of page 9, appellant urges that according to claim 2, "the adhesive surrounds the reinforcing fibers". The examiner considers this new interpretation of the claim to be incorrect. The claim recites "said internally reinforced braiding yarns being held together by expanded graphite integrally bonded to and surrounding said reinforcing fiber yarns with adhesive" (emphasis added). The expression "with adhesives" refers to the phrase "integrally bonded", and not to the term "surrounding". Appellant's new interpretation of this phrase is inconsistent with the specification and the English language. The specification (page 7, lines 6-13) merely discloses that the reinforcing fiber yarns and the expanded graphite are securely bonded to each other.

Regarding Case, appellant's arguments are copied verbatim from the previous brief. Appellant merely asserts that the fibers and strands of Case are not like the fibers and braiding yarns of claim 2. Appellant does not state what is allegedly different about these elements. Consequently, it can not be determined why appellant considers that these elements differ. Clearly, Case discloses all structure as claimed except for the expanded graphite. The teaching of expanded graphite has been provided by Schnitzler. For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,



DANIEL G. DEPUMPO  
PRIMARY EXAMINER

dgd

December 6, 2001

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